The Training School Bulletin

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Editorial

In Burlington County, New Jersey, a Colony for Feeble-Minded Men has been started. (See Miss Kite's article, p. .) Money is needed to complete the unit for forty. Twenty-six years ago a number of philanthropic men and women made just such modest beginnings for The Training School at Vineland; 1,100 different feeble-minded children have had the benefit of its care and training in that time, and to-day there are 400 at the parent institution, forty-five men at the Menantico Colony and twenty at the Burlington County Colony.

Largely due to the influence of the former superintendent and officers of The Training School, the New Jersey State Institution for Women and the State Village for Epileptics were established.

Money in large and small sums made The Training School possible, and the same program with a greater opportunity for development is the plan of the Colony. In the heart of a district where there is much isolation and much degeneracy, its opportunities to do a large piece of social work are evident.

This is a plea for your financial support. Send any amount, the need is pressing, but send something, be it ever so little.

You who are free from the sorrow of a feeble-minded child show your thankfulness in a material way by helping those who bear the burden. If the weight of woe is on your shoulders, send a little from your store to help others.

These children are innocents—they have the minds of children in the bodies of men. They do not understand the rush of normal life, and normal people do not understand them so they are constantly in trouble. Here in the Colony they are among their peers, the sad and shy manner gives place to joy and confidence.

Of thousands of things it is said, "Do it now." It is well said. Will you not send *now* your gift?

The Training School will forward it promptly.

In most States the elections are over and Legislatures will soon convene. This is the time to bring to the attention of legislators the needs of the feeble-minded of your community.

To give him a personal knowledge of two or three feeble-minded persons who need care will be much more convincing to your legislative representative than a hundred facts presented in an abstract manner.

If you as a citizen will make it your business to see that the Senator from your county is fully posted as to the conditions surrounding one feeble-minded person, you will find yourself one of hundreds of others who are doing likewise and you will have some constructive move made before the next Legislature adjourns.

There has been more public talk about the feeble-minded in the past five years than in the hundred years preceding! Is money tight? Very well; this is the time to get on your statute books a really constructive program for the care of the feeble-minded in your State. Do not ask for money, or ask for very little, but get a policy adopted so that you will have something toward which to work.

Complete care of the feeble-minded will be a matter of years, but a dozen earnest people determined to have it done can accomplish wonders. Gather the facts. Get a commission appointed to study the matter. Plead for medical inspection in every school district. See to the establishing of special classes for retarded children in the public schools. Have a dozen, or a hundred or a thousand children in the primary grades tested. Secure the interest of teachers, principals and superintendents. Start any part of it and keep that part going and you'll get results.

Sensory Discrimination in Normal and Feeble-Minded Children

by

Miss Anna M. Petersen and E. A. Doll

(Concluded)

Results with Normal Children.

Taking up the results obtained with normal children it is at once clearly apparent that there are some very characteristic differences. The subjects of this group range in age from 5 to 14 years. They are all able to perform the test as directed and within the limits of our apparatus, and their performances are not only somewhat better in average numerical values but also in a greater degree of reliability. Specifically, from Table 2 and Curve 2:

(1) There is a steady increase in average discriminative capacity with increase of age; $r = +.63$, P.E., .025. For ages 5 to 12, $r = +.65$, P.E., .025.

(2) The accompanying mean variations are quite low, the coefficient of variability ranging from .10 to .20, and the limits of variability are not very wide.

(3) The modal average is more reliable than is the case with defectives, but is not to be relied upon for the same reasons that apply in their case. Here also we have no data for computing the reliability coefficient, but feel that altho low it would be appreciably higher than with defectives.

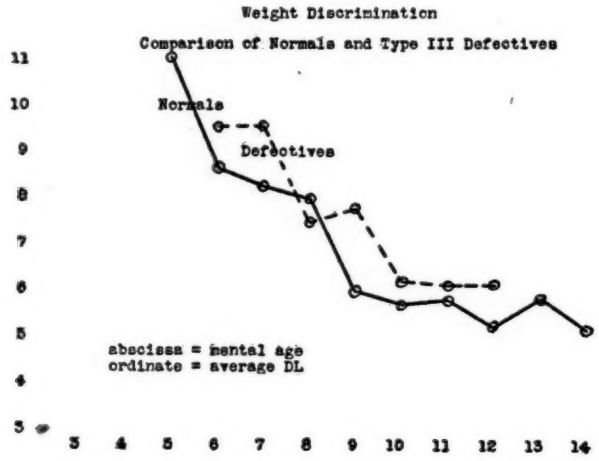
(4) There are no appreciable sex differences. At 5 points boys' DL's are higher and at 4 are lower, the differences at these points being very slight. In the total averages for the ages below 13 there is a superiority of 5.5% in favor of the boys.

COMPARISON OF NORMALS AND DEFECTIVES.

Comparing these results of normals with those for defectives:

(1) Curve 2 shows graphically that at all points but one the discrimination of normals is better than that of defectives. The differences, however, are apparent only for the weighted averages and the differences are but slight, amounting to 1 g. for the total average of each group. In absolute DL's the differences are not perceptible until computed.

(2) Defectives are more variable than normals (total m.v.'s of 1.9 and 1.1, respectively) and show greater individual differences. Subjectively, the conduct of the test with them is more difficult and the apparent reliability somewhat less.



Curve 2.---Showing comparative performances of normals and defectives at the same mental ages.

(3) Defectives are less capable than normals in following the directions of the experiment. This may be due to weaker comprehension of the *Aufgabe* or to weaker learning capacity, but probably is not due to weaker sensory capacity.

(4) Sex differences are slight, being about the same in amount but opposite in sex for the defectives; a superiority of 2.5%, rising to 6.5% for "pure feeble-minded" in favor of the girls, and for normals 5.5% in favor of the boys.

(5) Correlation with mental age is positive for both groups, but is considerably lower for defectives than for normals; $r = +.36$ and $+.65$, respectively.

COMPARISON OF NORMALS AND DEFECTIVES.

Normal Children.

Totals.

Age.	Cases.	Av.	m.v.	Limits.	Mode.
5	8	11.0	2.8	6–20	10
6	19	8.6	1.0	7–12	8
7	26	8.2	1.0	6–12	8
8	35	7.9	1.2	6–12	8
9	30	5.9	.6	4– 8	6
10	35	5.6	.9	4– 8	6
11	49	5.7	1.0	2–10	6
12	33	5.1	1.2	4– 8	4
13	21	5.7	.7	4– 8	6
14	6	5.0	1.0	4– 6	4
	235	6.7	1.1	2–20	6

Males.

5	4	11.0	4.5	6–20	10
6	6	9.0	1.3	8–12	8
7	13	7.7	1.3	6–10	8
8	16	7.8	1.5	6–12	6
9	16	5.8	.6	4– 8	6
10	17	5.7	.8	4– 8	6
11	27	5.8	1.0	4– 8	6
12	18	4.9	.9	4– 6	4
13	13	6.0	.3	4– 8	6
14	5	5.2	1.0	4– 6	6
	117	6.5	.8	4–20	6

Females.

5	4	11.0	1.0	10–12	11
6	13	8.4	1.0	7–10	8
7	13	8.6	1.3	6–12	8
8	19	8.1	.9	6–10	8
9	14	6.0	.6	4– 8	6
10	18	5.6	.8	4– 8	6
11	22	5.6	1.5	2–10	6
12	15	5.4	1.4	4– 8	4
13	8	5.1	.9	4– 6	6
14	1	4.0	..	....	..
	118	6.9	.6	2–12	6

Table 2.—Tabulation of results obtained with 262 normal public school children. The averages in this table are taken for the years below 13 for the purpose of comparing totals with defectives of the same mental ages.

Comparison of These Results with Others.

Normal Capacity.

In comparing our results with those obtained elsewhere it is necessary to remember that the method and apparatus of the several authorities referred to are widely different and the results, therefore, are not entirely comparable. Many of the conflicting conclusions may be ascribed to this cause.

Whipple (8, p. 191) gives Weber as citing in one place an index of efficiency (the ratio of absolute difference limen to the standard weight) of 3/32, and in another place 1/40, and Seashore as giving indexes of 1/17 or 1/24. Whipple himself obtained an average DL of 4.7 g. for eighth-grade boys, an index of 1/17. (Assuming our 14-year boys to be in the eighth grade, our average for five eighth-grade boys is 5.2 g., an index of 1/15.)

From Miss Thompson's results, whose apparatus and method are closely similar to ours (altho she uses a standard of 100 g.), we have computed an average DL of 7.2 g. for 25 men, and 8.6 g. for 25 women, a total average of 7.9 g., index of efficiency 1/13, for adult men and women (7, p. 36).

Burt and Moore (2, p. 369) give a median discrimination of 8.5 g. for boys and 12.5 g. for girls. Burt also gives (3, p. 20) an average of 8.7 ± 1.5 for elementary school children (ages 12.5 to 13.5) and 9.3 ± 1.6 for preparatory school children (same ages).

Gilbert, following a procedure of discrimination by sorting, with a standard weight of 8.2 g. gives norms for both sexes at ages 6 to 17 (4, p. 56). To make his results comparable with ours on the same age-basis, we have averaged his results for ages 6 to 12. This yields an average DL of 10.7 g. for boys and 10.8 g. for girls for those who succeeded in the test, an index of 1/8.

Spearman (6) quoted by Whipple (8) gives an index of 1/15 with conditions unfavorable or 1/20 with conditions favorable. Our own results yield a total average of 6.7 g., index of 1/12, for normal school children aged 5 to 12, and 7.8 g., index of 1/10, for defectives of mental ages 6 to 12, including all chronological ages, for those who succeed in the test. Our totals are not seriously affected by pathological types.

It may not be out of place to remark that the weights employed in the Binet Scale tests, which sometimes have been challenged as being too difficult to discriminate, are well within the limits of normal discrimination. The Binet procedure, moreover, allows either simultaneous or successive lifting, and the instructions are simple ("Give me the heavy one" for the 5-year test, and "Arrange in order of heaviest to lightest" for the 9-year test. At 5 years the comparisons are between 6 g. and 15 g., and 9 g. and 18 g., whereas our results with defectives and normals

under more difficult procedure and apparatus would warrant certainly 6 and 9, and 9 and 12, since our results indicate a *sensory* capacity of at worst 1/6, as against the index of 2.5 or 2.0 allowed by the Binet test. The usual substitution of 6-15, and 9-18, for the 3-12, and 6-15 of the original tests has also been questioned. Clearly, on the sensory basis, this substitution is permissible. Still further, the test at 9 years has often been called too difficult, and yet on the method we have employed which is less difficult intellectually, but more so sensorially, children of 9 years have an index of at worst 1/10, and should therefore be able to discriminate increases of 1 g. in the Binet weights instead of the 3 g. allowed. This test has also been called difficult for adults. Our data and that of the authorities quoted disprove this also, altho it is true that "a normal subject who would continue to examine and reflect would end by losing the fine sensation of difference" (1, p. 135).

Individual Differences.

To quote Whipple: "The work of every investigator has shown that the capacity to discriminate lifted weights differs very considerably among normal *S*'s, even when age, sex, and practise factors are eliminated. The author found 7 boys in 50 who could discriminate 80 and 81 grams, and one boy who could just discriminate 80 and 97 grams:—several experimenters have found their weights inadequate to measure the wide differences in capacity that they encountered" (8, p. 191). Burt and Moore (2, p. 366) concluded that "the reliability of our results with this test is not high," and cite a reliability coefficient of .68. Computations from Miss Thompson's results show for 25 men a variability of from 4 to 14 grams with a mode at 6 g., and an arithmetic average of 7.2 g., m.v. 2.1; and for women a variability of from 4 to 16 grams with a mode at 6 g., and an arithmetic average of 8.6 g., m.v. 3.3, a total coefficient of variability of .35. Computations from Gilbert's table for totals at ages 6 to 12 show an m.v. of 4.3, a coefficient of variability of .40. Gilbert's curve of the statistical mean variation shows a gradual decrease in variability with increase in age. Our own results show for normal children individual variations of from 2 to 20 grams, with a total m.v. of 1.1 for ages 5 to 12; for defectives our results show individual variations of from 3 to 20 grams, with a total m.v. of 1.9. On the basis of subjective impressions we should expect, as Burt and Moore find, a rather low reliability coefficient.

Correlations with Age.

Spearman found that his experiments "quite concorded in that the younger children were almost equal to the older ones, and both were not far from adults," and that in old age there is found "no appreciable loss of power" (6, p. 235). Gilbert, on the contrary, shows marked increases in discrimination with increase of age from 6 to 13 years, with little or no im-

provement after that age. Miss Thompson's averages for men and women, 7.9 g., are higher than Whipple's for eighth-grade boys, 4.7 g., and for our normal children, 6.7 g., but are lower than Burt's school children, 9.0 g. Our results with normals show marked increases in discrimination for increases in age from 5 to 14 years, with a correlation of $r = +.65$ for ages 5 to 12. For defectives our results show almost no differences with chronological age. Arranged in order of chronological age within mental age classification we find for Type III:

Mental age	8	9	10
Pearson r	+.17	+.19	—.24
Cases	41	20	16
Age-Range	8—37	9—27	14—35

in which the increases in age are gradual and fairly even. An inspection of the tables for correlation between age and types of success yields negative conclusions also, these types being functions of mental rather than chronological age. *In our opinion increase in discriminative capacity is a function of intellectual rather than physical maturation.*[8]

Sex Differences.

Gilbert's results for ages below 12 show boys superior to girls at 6 ages, inferior at 4, and equal at 2. Averaging his data for these years yields a sex superiority of 1% in favor of the boys. After the age of 13, however, boys are consistently superior. Spearman (6, p. 235 f), on the other hand, seems to challenge this, and asserts with regard to sex differences in adults that "both sexes appeared perfectly equal in all three senses (pitch, light, and weight) tested; no support whatever was given to the popular assertion that men are much superior." Spearman further affirms (p. 261) that "the fluctuating differences of sensory discrimination observable in connection with sex at the various stages of growth (referring to Gilbert) are chiefly and perhaps altogether a mere consequence of similarly fluctuating differences in their intelligence." But Miss Thompson found men 16% superior to women with DL's of 7.2 g. and 8.6 g. Burt and Moore also find boys markedly superior to girls with medians of 8.5 g. and 12.5 g., respectively (2, p. 369), and with only 2% of boys exceeding the median for girls. They also give (2, p. 364) 66% of men exceeding the median for women, with the general conclusion that "boys and men seem decidedly the more acute. The sex differences in children and adults appear to be about + 40 per cent." (p. 366). Our results show only slight sex differences in both groups. For the normal children boys are superior at 4 ages,

[8]We note that Dr. Marie Lipska-Librach (9) has recently presented a thesis "On the Relations between Sensory Acuity and Intelligence," based on an experimental study of 420 Brussels school children, in which she reaches practically the same conclusions. The subjects of the experiment were classified into 9-10, 10-11, and 11-12 year groups, and further subdivided into *retardés, réguliers,* and *avancés.* Experiments were made in tactile acuity, sensitivity to pain, visual acuity, auditory acuity, and strength of grip. In general, the more intelligent children showed greater acuity than the less intelligent, and the older children greater acuity than the younger.

inferior at 5, and equal at 1, with a sex superiority (for ages 5 to 12) of 5.5%. For the defectives the differences are also slight, being, however, in favor of the girls, with a superiority of 2.5%, which rises to 6.5% for "pure feeble-minded."

Correlations with Intelligence.

Pearson found a corrected correlation of +.44 between general intelligence and weight discrimination. Burt and Moore (2, p. 369), on the other hand, find a correlation of —.16. Burt also maintains that it is not unnatural to find little or no relation between capacity in this test and intelligence, because the sense of weight is "poor in cognitive quality and plays but a lowly part in the conscious life of man" (3, p. 7). Apparently Spearman's "general intelligence" is based on relative "common sense" and cleverness in school. Burt's estimate of intelligence was based on the ratings of the children (who were of approximately the same age) furnished by headmaster, teachers, examination lists, and schoolfellows' evaluations. Our correlations are with intelligence based on mental age as determined by the Binet Scale. For our normal children (at least those below 13) chronological age may be taken as a measure of mental age, altho it is true that our so-called normal children include backward as well as advanced and normal children. For a given group these probably compensate, and it is likely that the resulting error is but slight. Taking, then, chronological age of normals as a measure of mental age, and this as a measure of intelligence, we find a correlation between intelligence and discriminative capacity of +.65 for normal children aged 5 to 12. For defectives, mental age as measured by the Binet Scale may be taken as a safe measure of intelligence, with a resulting correlation of +.36.

Correlations with Other Tests.

Burt furnishes (3, p. 18) a table of "hierarchy of coefficients" for a series of mental tests among which lifted weights is included. In his results there is no significant correlation between this and other tests, the highest correlation being +.29 between weight and touch.

Effects of Fatigue and Practise.

We have no objective data for determinating the effects of fatigue or practise. On the basis of impressions gained during the conduct of the tests there is almost no effect of practise, but fatigue is rather rapid. With defectives the number of comparison series was more than with normals, probably due to the lower intensity of application and attention during the experiment and to their greater variability. "The consensus of opinion is that—the discrimination of lifted weights is but little affected by practise" (8, p. 192). Spearman (6, p. 233), too, thinks "Practise seems to have remarkably little effect," except for fore-exercise where "sometimes the improvement is enormous."

General Conclusions and Implications.

We are now in a position to consider the chief question of our experiment—Are the feeble-minded appreciably inferior to persons of normal intelligence in sensory capacity? As measured in the muscle sense by acuity in the discrimination of lifted weights we must, as has been seen, take into account the method of classification and treatment on which the comparison is based. We have pointed out that for defectives, by weighted arithmetic averages, there is a marked positive correlation with intelligence and that there is no correlation with chronological age, either regardless of mental age classification or within it. We have also demonstrated that with normal children there is an even more marked positive correlation with chronological age, which for these ages may be taken as mental age. It therefore follows that sensory discrimination as evidenced in this test is a function of intelligence. And this is what might have been expected *a priori,* since the factors involved in the test are chiefly mental; attention[9] or concentration with prolonged application to one directing idea, memory, and judgment following the idea of comparison.[10] Since it is generally conceded that defectives have in these respects an inferior capacity even at the same mental ages, it is to be expected that defectives will show an apparent weakness in sensory capacity which is in reality a weakness in intellect. The difference limens obtained would also be expected to have a lesser degree of reliability, be more variable, and be less acute than those of normals, all of which has been demonstrated in our data. When, therefore, in the face of these disadvantages we find only a slightly lower average discrimination, which is not at all evident in absolute DL's of individual performances, we feel justified in concluding that in the purely sensory capacity, aside from intellectual factors, defectives are not at all inferior to normals of the same intellectual capacity. We do not pretend to have conclusively demonstrated this point for all the senses, nor indeed even for the one under examination, since our experiment may be imperfect in some particulars. This is a matter

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[9]Mitchell (5) says of distractions: "Contrary to the traditional view, distractions (a) increase the precision of judgment, that is, the subject's judgments are more consistent, and (b) cause an overestimation of the weight, or, in other words, with a decrease of attention there is an increase in sensation intensity." This certainly is not the case with incidental and accidental distractions in the presence of weak attention, whatever may be the case with constant distractions of an experimental nature.

[10]Burt (3, p. 7) is of the opinion that "In a task so unfamiliar—as an experiment upon the lower senses much will depend upon the child's interest, conscientiousness, and care—upon his intelligence, not as operating thru or in connection with the sensory function tested, but as helping him to understand the experimenter's instructions and to comply with them in the performance of a difficult and tedious introspection."

for more careful and extended study, on which we are now at work in other sense departments. So far as we have at present been able to make a few more or less scattered tests in discriminations of length, and some tests in tapping, steadiness, and muscular memory, we do not find any marked inferiority except what might be expected on the basis of mental factors, such as attention, memory, judgment, will, and the like. With defects of these factors present, there is, evidently, a pseudo-defect of sensory capacity which is more apparent than real. Our experiments may be considered merely indicative of a very fruitful line of research rather than as having proved an hypothesis. In this connection, however, the results obtained by Dr. Lipska-Librach are most interesting and suggestive.

With respect to this point we venture again to refer to Binet, whose experiments our own confirm: "We have seen that defectives perceive little differences of sensations for weights or lengths almost as exactly as we. This is because there is no necessity for reflection, and the thot does not need to evolve; it suffices to have consciousness of an elementary sensation of difference. The act of thot is in itself elementary, and if the state of consciousness has an extreme accuracy, it owes that accuracy only to the perceived sensation, not to the psychological operation consisting in feeling. Moreover, we have already noted that a normal subject who would continue to examine and reflect would end by losing the fine sensation of a slight difference. This is indeed proof that all development of thot without going out to meet the result sought after cannot assure itself except in producing a good state of attention."

In conclusion we wish to indicate an implication which these results have for present-day pedagogy. At the present time experiments in sensory capacities are of considerable import for the pedagogy of normal and defective children Much time and energy are being expended in meeting the feverish demand for "sense-training," particularly in the special classes and in the primary grades. Most of the Montessori system has its basis, if not its ends, in the training of the senses to almost hyper-acuity, and to the Montessori movement may be ascribed much of the existing demand for sense-training in general. But very little actual measurement of the results obtained has as yet been attempted. The results from this present experiment certainly indicate that nothing is to be gained from the training of the muscle sense. How far this conclusion applies to the other senses, touch, smell, taste, sight and hearing, is purely a matter of theory and conjecture. The implication certainly is that formal sense-training is not only largely unnecessary, but that the extent and permanence of its effects are open to question. And if sense-training has as its ultimate ends the cultivation of the other faculties, or of the self, then it must meet the negative conclusions that have been obtained in the experimental measurements of transfer of training, formal discipline, etc.

SUMMARY.

(1) Discrimination of lifted weights is a function of intellectual rather than of sensory capacity.

(2) The discrimination of defectives is, on the average, slightly below that of normals of the same mental age, but this is not apparent from individual performances. Defectives also are more variable than are normals. Both of these inferiorities may be accounted for on a psychological rather than a sensory basis. In general, *the sensory capacity of defectives in muscle sense is not noticeably below normal.*

(3) There is a positive correlation with intelligence but no correlation with chronological age except where these are identical.

(4) The test is not diagnostically valuable except in the types of success in following instructions. Inability to do the test in the prescribed way indicates a mental age of below 8 years.

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THE EXTENSION DEPARTMENT

Edited by Alexander Johnson

No better opportunities for our Extension Work can be found than those afforded by the State Conferences of Charities and Correction. This is especially true in the Middle West, where the care of the feeble-minded is one of the live issues. During October and November the Director has attended the State Conferences in Indiana, Illinois, Missouri and Iowa. At each place illustrated lectures and other talks have been given.

The favorite day of the week for the opening of a conference in the Middle West is Saturday. On the conference Sundays addresses are made in the leading churches and in this way the conference is brought to the attention of the church-going people, with the usual result of gaining good audiences for the meetings of the following days. The Director has had the privilege of speaking to the largest church audiences in Hanover and Madison, Ind.; La Salle, Ill.; Springfield, Mo., and Fort Dodge, Iowa.

Meetings of business men under the auspices of commercial clubs have been addressed during the trip in Elyria, Ohio; Muncie, Ind.; St. Louis, Kansas City and St. Joseph, Mo.

College audiences have been addressed in Oberlin, Ohio; Hanover and Indianapolis, Ind., and sundry meetings arranged by Social Service Leagues and Associated Charities have been held in other places.

The western trip has included thirteen stereopticon lectures, five church audiences at their regular services, five commercial club meetings, seven college and university audiences, one Federation of Women's Clubs and one Association of Superintendents of County Poor Asylums, besides several minor meetings—a total of thirty-two audiences, including about eight or nine thousand people. The lantern slides were shown at several of the business men's meetings and at three of the college meetings.

Everywhere the interest in the care of the feeble-minded is seen to be great and growing. The meetings held in Missouri will be followed by another visit next February. At that time the Legislature will be in session and lectures will be given in Jefferson City, at which it is hoped some members of the Legislature will be present.

The particular effort being made in that state at present is to secure appropriations to complete the State's Colony for feeble-minded and epileptics. This Colony was planned for 1,000 inmates, or patients as they are called there, and at present has only room for 486, with a long waiting list and with several hundred known cases in St. Louis, Kansas City and St. Joseph—more than sufficient to over fill the accommodations when they shall be increased, as originally planned.

Colony Co-Operation

By Elizabeth S. Kite

Along the old highway that from earliest times has traversed the Pine belt of New Jersey, connecting the settlements of Barnegat Bay with Philadelphia, has arisen within the last six months a group of buildings, part of a new colony scheme, which purports to be the last word in economic and scientific philanthropy.

The exact location is at Four Mile, about eight miles within the Pine belt and six miles northwest of Chatsworth. The central idea of the new scheme is to reduce the cost of maintenance of feeble-minded State wards to such a degree that it will be possible for every State to care adequately for all who belong to this class; and this for the following reasons:

First—Philanthropic—That the feeble-minded everywhere may be protected, trained and rendered as happy and useful as possible.

Second—Social—That society may be preserved from the menace of this class, which, when unprotected, becomes a fertile source of the most noxious forms of poverty, vice and social degradation.

Third—Economic—That the heavy burden of the maintenance of this class under our present system, which ignores their existence, may be replaced by the lighter burden of their intelligent management.

The means to be employed to bring about these results are as follows:

First—That the feeble-minded of the lower grades shall be placed upon waste and uncultivated lands and their crude labor be employed in the first task of grubbing out and burning the brush and making ready for the higher feeble-minded grades who are capable, under direction, of completing the work of reclamation of the land.

Second—That the buildings for the use of this class be as neat, attractive and sanitary as possible, but of the utmost simplicity, requiring no elaborate system of management and in every way adapted to the simple needs of the feeble-minded.

Third—That instead of the slow method of obtaining money through State appropriations, which often leaves the taxpayer in ignorance of the entire problem and unconscious of the cost of the maintenance of this class, a system of arousing public interest be adopted and through local committees, voluntary contributions be solicited for the purchasing when need be of such waste land and the construction of such simple buildings upon it as shall be needed. When the plant is once established, then the State is to see to the maintenance of its wards.

The Burlington County Colony claims novelty only as to the third particular.

On August 27, 1913, a group of people, residents of one section of Burlington County, were addressed by Hon. Joseph P. Byers, Commissioner of Charities and Correction of the State of New Jersey, and Superintendent E. R. Johnstone, of The Training School at Vineland, and the county was given the option of being the first to start a colony under the conditions above given. So enthusiastic was the response that similar meetings were held in some twenty other localities in the county during the next two months, and on November 17 a general meeting of representatives of all the localities was called and work at once begun to collect the necessary funds.

The result reported three weeks later was a surprise for all. Instead of many large donations by men of wealth, there were comparatively few of these, but a very large number of small donations from working people whose realization of the need for such a colony was a surprise to those engaged in the work. In one small town, mostly composed of foreigners, 750 personal visits were paid and $400 collected, largely in 10 and 25-cent pieces. In another town a poor washwoman brought 50 cents that she had collected in her street and asked if she would be allowed to give so small a sum, saying she knew it was a good work and had been talking to the women about it, and they wanted to help. In some localities lectures were held and the proceeds sent to the general fund.

After the first round-up, about $6,000 was reported in the treasury, and the management decided at once to go ahead. At that time the services of a thoroughly equipped superintendent and matron were available, a man and his wife who had had eleven years' experience in the Training School under Professor Johnstone, and who were willing to undergo the sacrifices attendant upon the pioneer life they would be forced to live in the beginning, because of the great opportunity which they foresaw for the future of the work.

The middle of January saw them located in the nearest available town with their minds set upon their problem. It was March before the buildings could be begun, and June before the well had been dug and the first building completed so they could move to the spot and personally direct the growth of the Colony. In July the first six boys were sent to the Colony, and since then the number has been increased to twenty.

On August 6 a meeting of the Burlington County Committee was held at the Colony; the work already finished was inspected and the needs of its further development were considered. It was unanimously decided that the work should be completed and the committee pledged itself to start a re-canvass of the county to produce the means to pay all bills as they should fall due.

As soon as accommodations are made for forty boys the maintenance derived from the per capita rate paid by the State—which is forwarded intact through The Training School—will be sufficient to cover the cost of

living.

The attitude of the various State departments is most encouraging. The Advisory Colony Committee consists of

Hon. Joseph P. Byers, Commissioner of Charities.
Dr. Calvin N. Kendall, Commissioner of Education.
Hon. Alfred Gaskill, State Forester.
Dr. J. G. Lipman, Director of the State Experiment Station.
Col. E. A. Stevens, Commissioner of Roads.

Also

Mr. E. E. Read, Jr., of the Board of Directors, and
Supt. E. R. Johnstone, representing The Training School.

And

Mr. Daniel Bishop, of Florence;
Mr. Henry B. Coles, of Moorestown;
Mr. Clarence Deacon, of New Lisbon,

representing Burlington County.

The above-named State officials have agreed to assist in every manner possible, to the end that through this co-operation of the various State departments the work of caring for its feeble-minded wards may be accomplished at the least possible cost.

Since the call for the balance of the funds has come this same splendid co-operation has been evident in various parts of Burlington County. A group of young people in one town has been trained and they are offering their services to any locality where they may be invited, by giving a Cantata, the proceeds to go to the Colony Fund. Several hundred dollars have already been raised in this way.

By no means the least important result of this method of carrying forward the work of the care of the feeble-minded is the educational value which it bears for each community which in any way helps in its furthering. Since the greatest hindrance to proper care of the feeble-minded is the general ignorance which prevails as to the recognition of the higher and socially more dangerous type, it follows that this general education is the most essential move to precede the real work. When the country at large is awake to the problem in its entirety, the passing and enacting of the necessary legislation to control this problem will be but a question of time. At this time a little more money is needed to complete the buildings and equipment. Make a Thanksgiving-Christmas offering, sending your gifts to Joseph H. Roberts, Treasurer, Moorestown, N. J., or to The Training School at Vineland.

As It Happened

It was a familiar looking little frame building, and back in the woods just off the main highway. A small cleared space on each side was covered with well-trodden earth; a flag pole stood sentinel in front. Through the windows came the drone of voices, interrupted as the special examiner stepped from the car, by the sharp rap of a ruler against the teacher's desk.

As I entered the primary room for the first four grades, Class A was called—five hopeful farmers' sons who knew "apple" well enough at home in the orchard, but found it hard to recognize upon the blackboard. While the teacher—an attractive little lady of 20—labored with Class A, forty-six other boys and girls pursued their own labors, or their own pastimes at their desks. I should have said, at their part of a desk, for the room was crowded and many were sitting two in a seat.

There were several reasons why the room was crowded; one was that a special attendance officer recently appointed had been doing faithful work in this district; another reason was that a number of the larger boys and girls had been doing little work or no work at all, for some time past. In consequence, they were still in the primary room, altho past 12 years old.

It was quite plain that the "droning" proceeded for the most part from their side of the room, occasionally it was punctuated by little staccato exclamations, once by a suppressed "cat-call," followed by a quick scuffling of feet. Then one of the number arose and slouched out of the room while the rest looked on. Another tap at the desk—instruction in Class A was suspended while order and industry were restored. And so things would have gone on had I not looked up from the record I was studying and requested a consultation with the teacher.

With this record and the teacher's commentary to supplement my own observations, I made out a list of names and laid it on the desk. The children listened to me while the teacher studied this list, so that when the final invitation was given, "Who wants to come and try?" many raised their hands; among whom the right ones were sure to be chosen.

George A. was one of the first to volunteer. He was 13 and well built; he looked intelligent, and yet he was not doing the fourth-grade work! Mischief, malice and self-indulgence were written on his face. By his responses to the Binet test he proved to be normally intelligent for his years. The teacher asserted that he was not only indolent but "downright bad."

Henry B., who came out to "see what I was doing" a little later, tested between 8 and 9 mentally, altho past 12 in years He also was pronounced incorrigible by the teacher. Henry loved to tease, even to torture; was

entirely unreliable and very lazy.

Soon after came a short, thick-set little fellow who said he was 13, tho he did not look it. In manner, John C. was dull, obstinate, careless. Mentally he proved to be 9.

A very tall lad with tired, vacant expression, had attracted my attention. Since he did not appear to try the test, I went into the room to learn why. Philip sat at his desk, an expression half sheepish, half sullen on his face. His teacher asked, then urged, then commanded, but Philip did not move. Several other children volunteered, and after a while we came back to Philip. This time he was cajoled into coming with me. Philip tested 8-2. He is nearly 15 and very tall—and he wears "knee pants!"

Of the other large boys, several had been kept out of school a great deal to help with the work, but did well when present; one had recently moved into the district and was not yet placed. Still another was an Italian who had entered at 9 years of age. Then there were the thirty-six other boys and girls who were supposed to be taught everything they should learn in the first, second or third grades. Here were fifty-one individuals in all, varying in age from 5 to 15 years; in mental capacity the same—tho not in a line parallel with their years. Given one blackboard, a few desks, a table, a stove and some books, one little woman of 20 was expected to train, teach, advise and otherwise conduct them into the important period of adolescence! And this in a progressive Eastern State, not three miles from one of our most famous cities!

Something happened before I left that school. It has a bearing on the first part of this story, so I shall add it here.

The other teacher asked me to come to her door. There stood a man—a poor human wreck, pitifully crippled. His face was drawn with the peculiar spasm of the "ataxic," his hands quivered helplessly before him. As he stumbled in, at the teacher's invitation, he shook from head to foot, partly with palsy, partly with emotion. He raised his weak, stammering voice so that we could hear, and this is what he said: "The b-boys *s-stoned* me last night."

Somebody was named as the guilty one—it was Philip. Then a nice-looking boy was wrongly accused, and others, to vindicate him, gave the names of those whom they had seen stoning "Peter." I did not hear who they were, for I was talking with Peter—but when I turned to see, there stood the culprits in a row—Philip and the other three—George A., Henry B. and John; John sullenly silent, Philip and Henry protesting that they didn't mean nothin', the other fellow did it and so they did." George, intelligent, lazy, criminally inclined, had planned the "sport." He now looked on quite indifferent or, at most, slightly amused. John had merely followed, as he always did; the others joined in because the idea of throwing stones was suggested to them and they had not the mental or moral strength to

resist the suggestion.

How much more hopeful the future of that school, and of the boys as well, could they be given a chance to spend their time "throwing stones" to some good end, happy in the doing, instead of torturing a cripple and a conscientious little teacher—the while they learn nothing of use to themselves!

Inspiration or Discouragement

The letter of Mrs. J—— J——, published in the last Bulletin, was read by me with more than usual interest. It should certainly be—as I am sure you meant it to be, by its publication—an inspiration to all who are working with the feeble-minded children.

My own mental attitude, however, when I first read it, was such an interesting complex of incredulity, amazement, admiration and resentment (even that) that I was moved to make a careful analysis of the letter and of its effect upon me. Now I am led to write this to you because it has seemed to me that the letter, taken together with the remarks in "Gist and Comment" might after all prove to be in some instances something other than the inspiration it is meant to be. To the field worker, at least, whose usefulness depends upon her ability to diagnose, it may easily prove a source of profound discouragement. To the parent, who is apt to interpret the result in terms of his own wish for his child, a false hope.

"It was not a miracle but a piece of close, hard work that had *adjusted* a human being" is hopeful indeed if we do not remind ourselves that "adjustment" in such case can be, at the best, but limited; just as the deaf, the maimed, the blind, become adjusted. The over-expectant parent of a feeble-minded child, even the inexperienced reader, will mentally add a sequel to this letter in which the girl becomes a capable, independent member of society.

As to the question of diagnosis, it would be impossible, of course, for one who had not even seen the child to say that she belonged to this type or that, but does it not seem more than probable that she was a Mongolian? "Fat, formless, * * * featureless, face down," tongue inert * * * and the rest * * * the usual physical symptoms. A portrait, could one be obtained, would doubtless help to fix the diagnosis.

Again, were this the type, the very unusual results of so short a period of teaching can be explained. Because of her appearance she had probably been credited by most people with far less intelligence than she really had and consequently *neglected*. She was 9½ years old—a trainable age. If true to this type she was, potentially at least, imitative, curious, reasonably

docile, persistent, fair in memory. The regime of cleanliness, care in diet and other measures which resulted in her physical improvement must have quickened these faculties also. Now add the patient, careful work of her tutor and it is not unreasonable to expect results. There may well have been a most remarkable change. For this no amount of credit to her teacher can be too great. The happy result must have earned for her the unmeasured gratitude of the parents of a child to whom life had been given some meaning. My only fear is that their hopes and those of others who read may be set too high.

For the field worker the question remains, "Would the trained observer have been deceived, in the first instance, by the appearance of idiocy or, in the second, by the apparently phenomenal change?"

CORNELIA B. MEYTROTT.

Meat From Annual Reports

Extracts from the Annual Report of the Syracuse State Institution for Feeble-Minded Children

Feeble-mindedness is the social plague. In the past, those interested in social problems have dealt separately with the symptoms of the disease. Institutions have been established and programs worked out for dealing with the pauper, the prostitute, the criminal, the juvenile delinquent, the alcoholic, and the tramp. We now know that from twenty-five to fifty per cent. of those composing the anti-social classes are feeble-minded. We have learned from experience that we cannot reform the affectionate, attractive young woman who, with the mind of a child of eight or ten, could not even if she would, earn an honest living; or cure by years of prison discipline the simple-minded criminal, a life-long irresponsible boy. In treating the symptoms we are simply beating the air, and little progress can be made until the underlying cause is removed.

It is estimated that there are from twenty to thirty thousand feeble-minded in the State of New York. As the average feeble-minded woman bears twice as many children as the normal woman, part of whom at least are feeble-minded, it is evident that means must be taken without delay to deal comprehensively with the problem. The present institutions of the State, which accommodate about four thousand, cannot meet the demand made upon them for admissions. The Syracuse State Institution is taxed to its utmost capacity, and constant pressure is being made by the authorities in all parts of the State for the admission of more children.

To cope with this situation the State Board of Charities has adopted a comprehensive program for the segregation of the feeble-minded by the issue of State bonds for the enlargement of each of the existing State institutions.

Since the mental defective must usually be supported by charity, either public or private, it is doubtful whether the actual money cost of maintenance upon large institutional farm colonies will greatly exceed the present cost to the community, inasmuch as the expenditures required for the prisons, reformatories, courts, and other correctional machinery will be greatly lessened. However, be the cost increased or decreased, further provision must soon be made to relieve the pressure upon all the existing institutions for the feeble-minded and to segregate individuals who are a menace to the community.

During the year one of the officers, after perfecting herself in the Binet Simon tests for mentality by careful study and a visit to The Training School at Vineland, examined four hundred of the children.

The results in the great majority of cases are very satisfactory. In most instances the mental age agreed closely with that expected by the teachers and others who come in close contact with the children. A very few children successfully passed the tests. These were, in part, of the "moral imbecile" type, those who had repeatedly demonstrated their inability to live in institutions for normal children or in the many private households provided for them. In these cases the Binet Simon tests were useless, continued observation being necessary to prove the mental deficiency. Two children, seven and eight years old, who had been considered normal by their teachers, successfully passed the tests up to age and were discharged. Several other children who are good talkers and would easily pass for normal among strangers, tested under twelve years of mental age.

The rule that no child who is less than three years behind the normal mental age should be considered feeble-minded must be modified as applied to the children in the institution from seven to nine years of age. We have children rating only one or two years behind at these ages who are distinctly feeble-minded. They develop to this point fairly well, but with increasing years seem to reach their limit and then drop back rapidly. These children make little or no progress in the public schools.

We consider the Binet test, when given by an experienced and fair-minded examiner, the best available tool in determining the mental status of the ordinary type of feeble-minded children. In cases of moral delinquency this test is not final and other things must be taken into consideration.

The time has passed when any one was considered good enough to teach the feeble-minded, and the policy has been adopted to appoint as teachers only graduates of normal or special training schools. The school has had the services of several very capable instructors, who were not so qualified, but it is believed that this program will produce in the long run a higher average of ability.

Field Day

A field meet was held on the athletic grounds on Saturday, October 31. The weather was ideal for outdoor sports, and both spectators and contestants enjoyed the events immensely.

The meet opened at 1.30 P. M. with a baseball game between a team of boys and one of employees. Jack pitched for the Training School and Mr. F. for the employees. After the second inning the boys hit Mr. F.'s curves very freely, while at no time in the game was Jack in danger. The final score was 13 to 4.

The program of races and field events was run off very smoothly. The pillow fight attracted the greatest number of contestants. In this event two boys face each other astride a smooth pole about three feet from the ground. They attack each other with a pillow held in the right hand, and with the left attempt to ward off the blows of their opponent. The boy first dislodged is the loser. The combat is harmless and very amusing. The suddenness with which some of the performers fall and the contortions they go through in an effort to regain their balance invariably provoke laughter.

The Events and the Winners.

1. 50-yard Race for Small Boys....1. Theodore N.
   2. Carl S.
   3. John W.
2. 100-yard Race .....1. William D.
   2. Gordon M.
   3. Theodore N.
3. Standing Broad Jump.....1. John D.
   2. Jack G.
   3. Charles McK.
4. Tug-of-War .....Elm Cottage defeated Hazel Cottage.
5. Sack Race .....1. Harold M.
   2. Charles G.
   3. Harold E.
6. Three-Legged Race .....1. Harry-Louis.
   2. Charlie-George.
7. Pillow Fight and Indian Wrestling.

Outdoor games are a regular part of the physical training of the boys. They enjoy baseball, basketball and volley ball, and play the games with a vim and enthusiasm such as only healthy, red-blooded boys can show.

November 6, 1914. J. COHEN.

Hallowe'en Celebration

On October 28 the children and employees gathered in Garrison Hall for a Hallowe'en celebration. Most of those present were in appropriate costumes. The program opened with a grand march for the children, followed by another for the employees. After some ducking for applies and similar feats, the hall was darkened and Professor Johnstone told his ghost story. The audience was very quiet, and the weird faces that peered out of the dim corners added to the mystery of the story. Every one held his breath until the tale ended with a shout that made everybody jump. Then there stalked slowly into the room a large grotesque ghostly figure. Later, while a two-step was in progress, the old horse resurrected from the 1913 Christmas play reappeared and created shouts of joy among the dancers. There were games for the girls and the larger boys, an innovation in the form of a pillow fight furnishing no end of entertainment. After refreshments were served all filed back to their cottages, agreeing that they had never enjoyed a more pleasant evening.

Program.

1. Grand March .....For all. (Judges will note costumes.)
2. Games for boys.....(a) Ducking for apples
   (b) Apple and stick.
   (c) Candy on string.
3. Two-step by the girls.
   Games for girls.....(a) Pinning black cat.
   (b) Eating apple from string (3 girls).
4. Ghost Story by Professor Johnstone.
   Dance of the Spooks and Shades.
   Ghostly Visitor.
   Piano Solo. Carol Johnstone.
   Extra. Employees Dance—Paul Jones.
5. The Frogs. (From entertainment given by Misses Lichtenberger and Capner.)
6. Game for boys.....(a) Pillow fight.
   (b) Indian wrestling.
7. Pie-Eating Contest—Eddie, John and Raymond.
8. Dance (two-step.) (Old Gray Mare from 1913 Christmas Play.) Chorus by everybody, "The Old Gray Horse."

9. Games and contest (boys).....(a) Ducking in flour.
   (b) Eating doughnuts on string.
   (c) Whistling game.
10. Chair Dance by Girls.
11. Jumping Game in Circle.

Refreshments.

Good Night Song.

Program arranged by Misses Randolph and Lichtenberger, Messrs. Kelley and Cohen.

CHRISTMAS ENTERTAINMENT

"COLUMBUS IN A MERRY KEY"

Will be given for the children of The Training School on Monday Evening, December 28th; and for our friends on Wednesday Evening, December 30th.

"*Columbus in a Merry Key*" is an historical comic opera depicting the Sailing of Columbus; the Discovery of America and the Return to Barcelona. About 100 children take part.

The receipts from the sale of seats on the thirtieth will be used to aid Santa Claus.

***King Tapioca* (*of the Caribbee Islands*) "Ha, it is Columbus! We are discovered." Act III Scene 1.**